

# Release Notes

<b>Model</b>	Hurricanes in a Multi-scale Ocean coupled Non-hydrostatic model (HMON)
<b>Version</b>	v3.0.0
<b>Implementation date/time</b>	6/11/2020 1200UTC
<b>Purpose</b>	The HMON system runs on-demand with input provided by the National Hurricane Center (NHC) and Central Pacific Hurricane Center (CPHC). HMON provides hurricane track and intensity forecast guidance to day 5.25 over NATL, EPAC, and CPAC oceanic basins.
<b>Changes being made for this release</b>	The scientific and technical enhancements include the following: <ul style="list-style-type: none"> <li>- Upgrade of Nonhydrostatic Multiscale Model on the B-grid (NMMB) dynamic core with bug fixes</li> <li>- Model vertical resolution has been increased from 51 to 71 levels</li> <li>- Use original IGBP roughness length</li> <li>- Turn on GWD over the outermost domain</li> <li>- Use the latest version of HYCOM</li> </ul>
<b>Developed by</b>	National Weather Service (NWS) / National Center for Environmental Prediction (NCEP) / Environmental Modeling Center (EMC)
<b>Runs on</b>	The National Weather Service (NWS) Weather and Climate Operational Supercomputing System (WCOS)
<b>Community software</b>	Non-hydrostatic Mesoscale Model (NMM) on B-grid (NMMB); HYbrid Coordinate Ocean Model (HYCOM); Unified Post-Processor (UPP)
<b>Input</b>	National Hurricane Center (NHC) tcvitals, Global Forecast System (GFS), Global Data Assimilation System (GDAS) , Real Time Ocean Forecast System (RTOFS)
<b>Output and where to find it</b>	Current and previous cycles are available at NOMADS, <a href="http://nomads.ncep.noaa.gov/pub/data/nccf/com/hur/prod/">http://nomads.ncep.noaa.gov/pub/data/nccf/com/hur/prod/</a> and MAG, <a href="http://mag.ncep.noaa.gov/tropical-guidance-model-storm.php">http://mag.ncep.noaa.gov/tropical-guidance-model-storm.php</a>
<b>Primary users</b>	NHC, CPHC and NWS Pacific Region
<b>In the future</b>	Implementation of a data assimilation system; Further improvements to hurricane physics (especially microphysics and air-sea-wave interactions); Further improvements to vortex initialization; assimilation of aircraft and satellite data; Increased nest domain size; Implementation of HMON in the West Pacific basin

For more information on this model, please contact [ncep.pmb.dataflow@noaa.gov](mailto:ncep.pmb.dataflow@noaa.gov) .